SRS-50

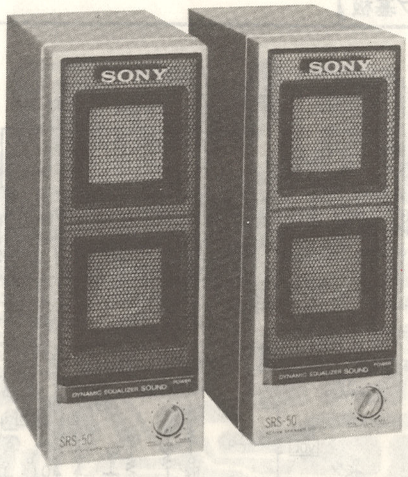
SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

AE 09

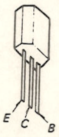
SPECIFICATIONS

Amplifier section	
Power output	3.5 W+3.5 W (Peak) (with the internal batteries)
Input	Minijack Impedance 150 ohms at 1 kHz
Speaker section	
System	Full-range, closed type, magnetically shielded design
Speaker unit	Full-range: 50 × 50 mm (2 × 2 inches) Passive radiator: 50 × 50 mm (2 × 2 inches)
Nominal impedance	4 ohms
Sensitivity	84 dB/W/m
Power handling capacity	Nominal 3 W
General	
Power requirements	6 V dc four IEC designation R14 batteries (size C) per unit DC IN 6 V jack accepts: optional Sony AC-D468 ac power adaptor optional Sony DCC-120 car battery cord for use with 12 V car battery
Battery life	at 50 mW+50 mW output Approx. 30 hours with Sony SUM-2 (NS) New Super batteries Approx. 60 hours with Sony Eveready AM2 alkaline batteries
Dimensions	Approx. 64 × 161 × 109 mm (w/h/d) (2⅝ × 6⅜ × 4⅜ inches) incl. projecting parts and controls
Weight	Approx. 420 g (14.8 oz) (per unit) not incl. batteries and other accessories Approx. 620 g (1 lb 6.2 oz) (per unit) incl. batteries, not incl. other accessories

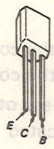


- **Semiconductor Lead Layouts**

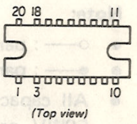
2SA1048-GR



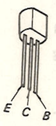
2SC2458



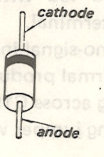
LA4125



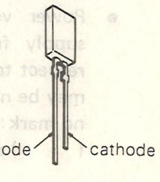
2SA772-14



1SS119
RD3.6ELI



TLR211



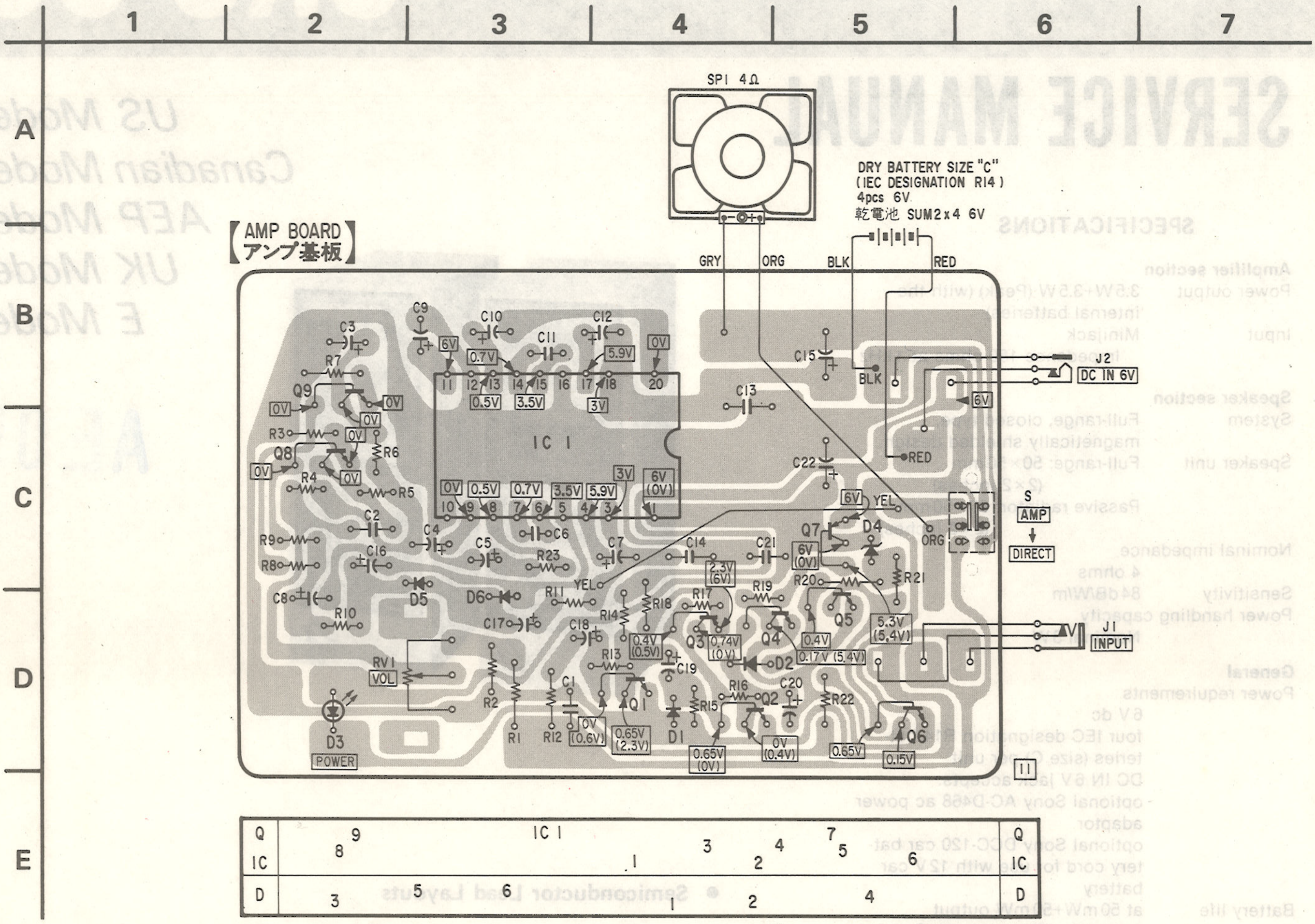
MICROFILM

STEREO ACTIVE SPEAKER SYSTEM

SONY®

ACC

1. MOUNTING DIAGRAM ● See page 1 for semiconductor lead layouts.


1
2
3
4
5
6
7
A
B
C
D
E
SP1 4Ω
DRY BATTERY SIZE "C"
(IEC DESIGNATION R14)
4pcs 6V
乾電池 SUM2x4 6V
【AMP BOARD】
【アンプ基板】
GRY
ORG
BLK
RED
J2
DC IN 6V
S
AMP
DIRECT
J1
INPUT
IC 1
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
D1
D2
D3
POWER
D4
D5
D6
RV1
VOL
YEL
Q
IC
D

Note:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- Power voltage 6 V and fed with regulated dc power supply from battery terminal. Voltages are dc with respect to ground with no-signal input. Voltage variations may be noted due to normal production tolerances.
  no mark: When shorting across C19 with the jumper wire.
  (   ): When removing jumper wire above.

3. ELECTRICAL PARTS LIST

ELECTRICAL PARTS

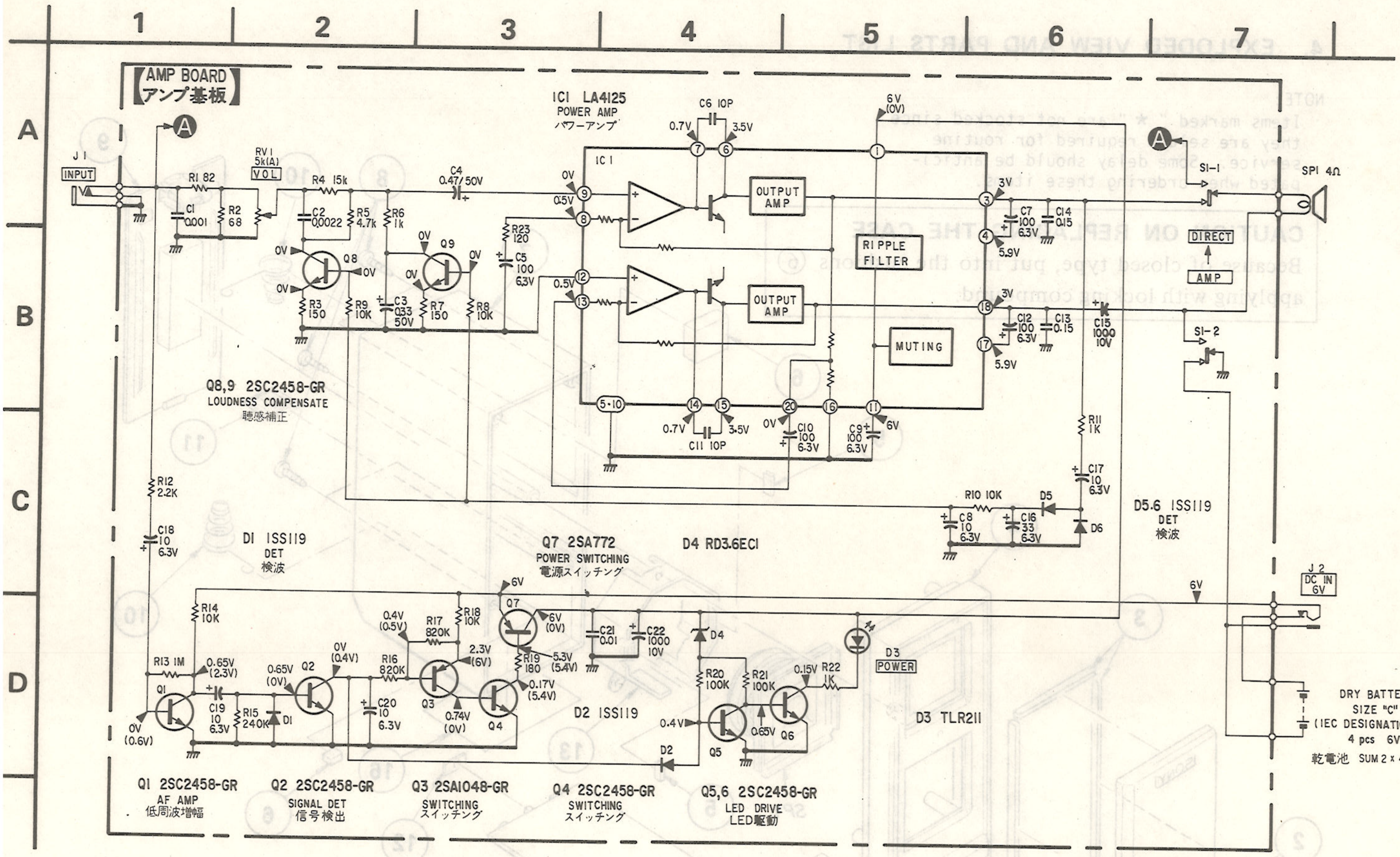
Ref.No.	Part No.	Description			
901	*A-4518-243-A	MOUNTED PCB, AMPLIFIER			
C1	1-161-039-00	CERAMIC	0.001MF	10%	25V
C2	1-130-475-00	MYLAR	0.0022MF	5%	50V
C3	1-123-609-00	ELECT	0.33MF	20%	50V
C4	1-124-253-00	ELECT	0.47MF	20%	50V
C5	1-123-307-00	ELECT	100MF	20%	6.3V
C6	1-102-947-00	CERAMIC	10PF	5%	50V
C7	1-123-307-00	ELECT	100MF	20%	6.3V
C8	1-124-221-11	ELECT	10MF	20%	6.3V
C9	1-123-307-00	ELECT	100MF	20%	6.3V
C10	1-123-307-00	ELECT	100MF	20%	6.3V
C11	1-102-947-00	CERAMIC	10PF	5%	50V
C12	1-123-307-00	ELECT	100MF	20%	6.3V
C13	1-130-497-00	MYLAR	0.15MF	5%	50V
C14	1-130-497-00	MYLAR	0.15MF	5%	50V
C15	1-124-473-11	ELECT	1000MF	20%	10V
C16	1-123-318-00	ELECT	33MF	20%	6.3V
C17	1-124-221-11	ELECT	10MF	20%	6.3V
C18	1-124-221-11	ELECT	10MF	20%	6.3V
C19	1-124-221-11	ELECT	10MF	20%	6.3V
C20	1-124-221-11	ELECT	10MF	20%	6.3V
C21	1-161-013-00	CERAMIC	0.01MF	10%	25V
C22	1-124-473-11	ELECT	1000MF	20%	10V

NOTE:

Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CAPACITORS:
· All capacitors are in μF.
MF:μF, PF:μμF.

2. SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
A
B
C
D
AMP BOARD
アンプ基板
J1
INPUT
A
R1 82
C1 0.001
R2 68
RV1 5k(A)
VOL
R4 15k
C2 0.0022
R5 4.7k
R6 1k
C4 0.47/50V
R23 120
C5 100 6.3V
Q8
Q9
R3 150
R9 10K
C3 0.33 50V
R7 150
R8 10K
0V
0.5V
IC1 LA4125
POWER AMP
パワーアンプ
IC1
C6 10P
0.7V
3.5V
OUTPUT AMP
OUTPUT AMP
RIPPLE FILTER
MUTING
6V (0V)
3V
5.9V
C7 100 6.3V
C14 0.15
C12 100 6.3V
C13 0.15
C15 1000 10V
C11 10P
C10 100 6.3V
C9 100 6.3V
6V
S1-1
S1-2
SP1 4Ω
DIRECT
AMP
Q8,9 2SC2458-GR
LOUDNESS COMPENSATE
聴感補正
R11 1K
C17 10 6.3V
R10 10K
D5
D6
C8 10 6.3V
C16 33 6.3V
D5.6 1SS119
DET
検波
R12 2.2K
C18 10 6.3V
D1 1SS119
DET
検波
Q7 2SA772
POWER SWITCHING
電源スイッチング
D4 RD3.6EC1
J2
DC IN 6V
R14 10K
R13 1M
0.65V (2.3V)
Q1
0V (0.6V)
C19 10 6.3V
R15 240K
D1
0.65V (0V)
Q2
0V (0.4V)
C20 10 6.3V
0.4V (0.5V)
R17 820K
R18 10K
R16 820K
Q3
2.3V (6V)
0.74V (0V)
Q4
Q7
6V (0V)
R19 180
5.3V (5.4V)
0.17V (5.4V)
C21 0.01
C22 1000 10V
D2 1SS119
D4
R20 100K
R21 100K
0.4V
Q5
0.65V
Q6
0.15V
R22 1K
D2
D3
POWER
D3 TLR211
DRY BATTERY
SIZE "C"
(IEC DESIGNATION R14)
4 pcs 6V
乾電池 SUM 2 x 4 6V
Q1 2SC2458-GR
AF AMP
低周波増幅
Q2 2SC2458-GR
SIGNAL DET
信号検出
Q3 2SA1048-GR
SWITCHING
スイッチング
Q4 2SC2458-GR
SWITCHING
スイッチング
Q5,6 2SC2458-GR
LED DRIVE
LED駆動

ELECTRICAL PARTS

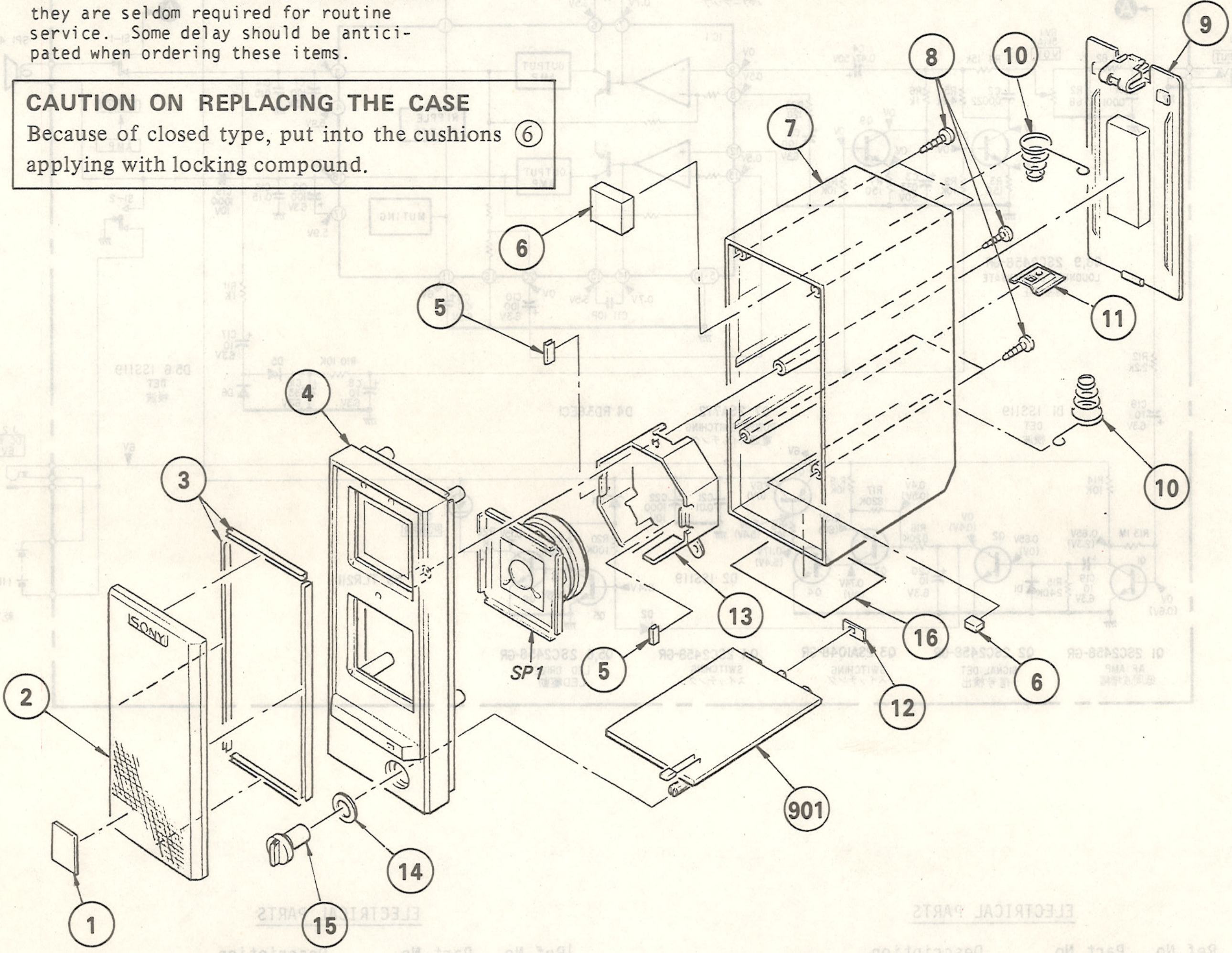
Ref.No.	Part No.	Description			
D1	8-719-911-19	DIODE 1SS119			
D2	8-719-911-19	DIODE 1SS119			
D3	8-719-800-40	DIODE TLR211			
D4	8-719-101-38	DIODE RD3.6EL1			
D5	8-719-911-19	DIODE 1SS119			
D6	8-719-911-19	DIODE 1SS119			
IC1	8-759-841-25	IC LA4125			
J1	1-507-578-00	JACK (INPUT)			
J2	1-507-563-21	JACK, DC (DC IN)			
Q1	8-729-245-83	TRANSISTOR 2SC2458			
Q2	8-729-245-83	TRANSISTOR 2SC2458			
Q3	8-729-204-83	TRANSISTOR 2SA1048-GR			
Q4	8-729-245-83	TRANSISTOR 2SC2458			
Q5	8-729-245-83	TRANSISTOR 2SC2458			
Q6	8-729-245-83	TRANSISTOR 2SC2458			
Q7	8-760-514-10	TRANSISTOR 2SA772-14			
Q8	8-729-245-83	TRANSISTOR 2SC2458			
Q9	8-729-245-83	TRANSISTOR 2SC2458			
R1	1-247-105-00	CARBON	82	5%	1/4W
R2	1-247-103-00	CARBON	68	5%	1/4W
R3	1-247-111-00	CARBON	150	5%	1/4W
R4	1-247-159-00	CARBON	15K	5%	1/4W
R5	1-247-147-00	CARBON	4.7K	5%	1/4W
R6	1-247-131-00	CARBON	1K	5%	1/4W
R7	1-247-111-00	CARBON	150	5%	1/4W
R8	1-247-155-00	CARBON	10K	5%	1/4W
R9	1-247-155-00	CARBON	10K	5%	1/4W
R10	1-247-155-00	CARBON	10K	5%	1/4W
R11	1-247-131-00	CARBON	1K	5%	1/4W
R12	1-247-139-00	CARBON	2.2K	5%	1/4W
R13	1-246-545-00	CARBON	1M	5%	1/4W
R14	1-247-155-00	CARBON	10K	5%	1/4W
R15	1-246-530-00	CARBON	240K	5%	1/4W
R16	1-246-543-00	CARBON	820K	5%	1/4W
R17	1-246-543-00	CARBON	820K	5%	1/4W
R18	1-247-155-00	CARBON	10K	5%	1/4W
R19	1-247-113-00	CARBON	180	5%	1/4W
R20	1-247-179-00	CARBON	100K	5%	1/4W
R21	1-247-179-00	CARBON	100K	5%	1/4W
R22	1-247-131-00	CARBON	1K	5%	1/4W
R23	1-247-109-00	CARBON	120	5%	1/4W
RV1	1-230-693-11	RES, VAR, CARBON 5K (VOLUME)			
S1	1-554-222-00	SWITCH, SLIDE (DIRECT-AMP)			
SP1	1-503-469-11	SPEAKER 4 OHMS			

4. EXPLODED VIEW AND PARTS LIST

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CAUTION ON REPLACING THE CASE

Because of closed type, put into the cushions ⑥ applying with locking compound.



No.	Part No.	Description	REMARKS
1	3-703-710-01	STICKER, SONY SYMBOL (12)	
2	X-3894-901-1	GRILLE ASSY	
3	9-911-837-XX	CUSHION (LARGE),GRILLE STOPPER	
4	X-3894-904-1	(SILVER)...PLATE ASSY, BUFFLE	
	X-3894-907-1	(BLACK)....PLATE ASSY, BUFFLE	
5	3-831-441-11	SHEET	
6	9-911-846-XX	CUSHION (LARGE), HOLE	
7	3-894-916-01	(SILVER)...CASE (MAIN)	
	3-894-916-11	(BLACK)....CASE (MAIN)	
8	7-685-547-14	SCREW +BTP 3X10 TYPE2 N-S	
9	X-3894-902-1	(SILVER)...CASE ASSY, BATTERY LID	
	X-3894-905-1	(BLACK)....CASE ASSY, BATTERY LID	
10	3-894-904-01	TERMINAL, BATTERY	
11	3-892-467-01	TERMINAL, + BATTERY	
12	3-831-441-XX	SHEET, BLIND	
13	*3-894-911-01	FRAME, SHIELD, MAGNETIC	
14	3-894-905-01	RING, KNOB	
15	X-3894-903-1	(SILVER)...VOLUME ASSY, KNOB	
	X-3894-906-1	(BLACK)....VOLUME ASSY, KNOB	
16	3-894-901-01	LABEL, MODEL NUMBER	
901	*A-4518-243-A	MOUNTED PCB, AMPLIFIER	

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-557-565-11	CORD (WITH PLUG)
1-557-643-11	CORD, DC PLUG
3-527-213-00	LABEL, SERIAL NUMBER
3-701-620-00	BAG, POLYETHYLENE
3-703-910-01	(BLACK)....LABEL, COLOR
3-703-921-01	(SILVER)...LABEL, COLOR
3-760-257-11	MANUAL, INSTRUCTION
3-894-917-01	BAG, PROTECTION
3-894-925-01	INDIVIDUAL CARTON
3-894-926-01	CUSHION

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